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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,918	02/03/2006	Neil Walter Lindh Adcock	006422.00036	9961

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TULSA, OK 74103

EXAMINER

TOLAN, EDWARD THOMAS

ART UNIT	PAPER NUMBER
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3725

MAIL DATE	DELIVERY MODE
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05/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,918

Applicant(s)

LINDH ADCOCK, NEIL WALTER

Examiner

Edward Tolan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

The reference on the IDS to MacMillan Publishing has not been considered because a publication date cannot be confirmed by the papers sent by Applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,7,11,13-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hohwart (2,307,680). Hohwart discloses a tap (30) having two starts of triangular thread forms (A,B) wherein the thread form (B) has a thread angle of 30 degrees (page 3, column 1, lines 48-62). The tap is used to produce female threads (12). In figure 6 Hohwart discloses that the crests of thread form (B) are radiused (have a curved tip). The tap (30) has square driving end portion (32). Regarding claims 17 and 20, the threads (12) produced by the tap of Hohwart are on a thread ring gage, it is inherent that the gage forms a male member matching the threads (12). Regarding claim 11, standard M6 course or M8 fine threads have a pitch of 1mm.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 12, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohwart (2,307,680) in view of Beck (3,125,772). Hohwart does not disclose that the tap end is chamfered. Beck teaches (figure 7), frustoconical chamfered portion (42), chamfered thread (52) portion (40) having an angle of 6 degrees (column 5, lines 25-50) and lubrication grooves (30). It would have been obvious to one skilled in the art, at the time of invention to provide the threads of Hohwart with a chamfer as taught by Beck in order to operate the tap with a small amount of load and torque and to cut the initial threads with high precision.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hohwart (2,307,680) in view of Corrette (4,666,348). Hohwart does not disclose a crest radius of curvature of 0.165 to 0.175mm. Corrette teaches that it is known to form a thread forming die (86) with radiused crests (90) of 0.007 inches (.17 mm). It would have been obvious to one skilled in the art at the time of invention to radius the crests of Hohwart as taught by Corrette in order to improve die life.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohwart (2,307,680) in view of Baubles (3,069,961). Hohwart does not disclose radiused roots. Baubles teaches a thread forming die (36) having radiused crests (38) and roots (42). It would have been obvious to one skilled in the art at the time of invention to provide the tap of Hohwart with radiused roots as taught by Baubles in order to form threads with increased strength.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525. FAX communications should be sent to 571-273-8300.

EDTOLAN
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Ed Tolan', is written over the printed name and title.